

REMARKS

In response to the Office Action dated June 21, 2010, claims 1, 4, 7, 14, 24 and 42 have been amended. Claims 1, 4-9, 14, 18-19, 23-24, 28-29, 42-43, 45-50, 56 and 59 are pending in the application.

In paragraph 4 on page 2 of the Office Action, claims 1, 4-9, 14, 18, 19, 23, 24, 28, 29, 42, 43, 45-50, 56 and 59 were rejected under § 103(b) as being unpatentable over Banker in view of Hoarty and Palazzi.

Applicant respectfully traverses the rejection, but in the interest of expediting prosecution has amended the claims.

Independent claim 1 sets forth a hardware upgrade for a set top terminal that includes an interface signal path for providing communication with a microprocessor of the set top terminal for routing subscriber input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal, a hardware upgrade modem for providing communication between the hardware upgrade and one or more headends, wherein the set top terminal receives television program signals based on the subscriber input received from the microprocessor of the set top terminal, a hardware upgrade microprocessor, coupled to the modem of the hardware upgrade, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware upgrade is inserted into a card receiving slot, the hardware upgrade microprocessor providing enhanced functional capabilities to the set top terminal, processing circuitry, coupled to the hardware upgrade processor, for receiving interactive input from the subscriber, for interpreting the received interactive input, for generating responses based on the received interactive input and for

providing the generated responses to the microprocessor of the set top terminal and memory, coupled to the hardware upgrade microprocessor, for storing data therein, wherein the hardware upgrade is a card insertable into the card receiving slot of the set top terminal, the hardware upgrade microprocessor being coupled to a modulator and demodulator to add a data modulation and demodulation function to the set top terminal such that data may be retrieved by the modem of the hardware upgrade from the one or more headends and stored in the memory of the hardware upgrade, wherein the data received by the modem of the hardware upgrade comprises information from an interactive service for accessing an on-line database thereby allowing a user to use the set top terminal to engage in actual transactions using two-way communications over the modem of the hardware upgrade with the interactive service via submenus provided by the hardware upgrade microprocessor as an overlay to a program displayed by the microprocessor of the set top terminal, wherein the hardware upgrade microprocessor processes data and instructions stored in the memory of the hardware upgrade to provide enhanced functional capabilities for the set top terminal and to process subscriber inputs received from the set top terminal. Independent claims 1, 14, 24 and 42 include similar elements.

Banker fails to disclose, teach or suggest a hardware upgrade for a set top terminal that includes a hardware upgrade modem for providing communication between the hardware upgrade and one or more headends. Rather, Banker merely describes subscriber terminals 40, 44 and 48 that include a modem.

Banker also fails to disclose, teach or suggest processing circuitry, coupled to the hardware upgrade processor, for receiving interactive input from the subscriber, for interpreting the received interactive input, for generating responses based on the received

interactive input and for providing the generated responses to the microprocessor of the set top terminal. Banker only discloses a secure microprocessor that may be part of the set top terminal or included in the expansion card. However, Banker does not mention the expansion card includes processing circuitry that is coupled to the hardware upgrade processor.

Banker also fails to disclose, teach or suggest that the data received by the modem of the hardware upgrade comprises information from an interactive service for accessing an on-line database thereby allowing a user to use the set top terminal to engage in actual transactions using two-way communications over the modem of the hardware upgrade with the interactive service via submenus provided by the hardware upgrade microprocessor as an overlay to a program displayed by the microprocessor of the set top terminal. Instead, Banker discloses that the set top terminal communicates with the headend. Banker does not disclose the expansion card communicating with anything but the set top terminal.

Thus, Banker fails to disclose, teach or suggest the invention as defined in independent claims 1, 14, 24 and 42.

Hoarty fails to overcome the deficiencies of Banker. Hoarty is merely cited as disclosing a home interface controller 13 that includes input and output connections 261 for cable television RF. The home interface controller 13 also includes an expansion interface 263. Hoarty only discloses that an expansion chassis may be connected to the home interface controller via the expansion interface. Hoarty does not disclose an insertable hardware upgrade and does not disclose a hardware upgrade for a set top terminal that includes a hardware upgrade modem for providing communication between the hardware upgrade and one or more headends.

Hoarty also fails to disclose, teach or suggest processing circuitry, coupled to the hardware upgrade processor, for receiving interactive input from the subscriber, for interpreting the received interactive input, for generating responses based on the received interactive input and for providing the generated responses to the microprocessor of the set top terminal. Hoarty does not mention a hardware upgrade that provides processing of interactive input from a subscriber.

Hoarty also fails to disclose, teach or suggest that the data received by the modem of the hardware upgrade comprises information from an interactive service for accessing an on-line database thereby allowing a user to use the set top terminal to engage in actual transactions using two-way communications over the modem of the hardware upgrade with the interactive service via submenus provided by the hardware upgrade microprocessor as an overlay to a program displayed by the microprocessor of the set top terminal. Instead, Hoarty only discloses that an expansion chassis may include a modem. However, Hoarty fails to describe the modem is configured or functions to receive information from an interactive service for accessing an on-line database thereby allowing a user to use the set top terminal to engage in actual transactions using two-way communications over the modem of the hardware upgrade with the interactive service via submenus provided by the hardware upgrade microprocessor as an overlay to a program displayed by the microprocessor of the set top terminal.

Thus, Banker and Hoarty, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claims 1, 14, 24 and 42.

Palazzi fails to overcome the deficiencies of Banker and Hoarty. Palazzi is merely cited as disclosing a modem for communicating with a remote database. However, Palazzi

fails to mention a hardware upgrade for a set top terminal that includes a hardware upgrade modem for providing communication between the hardware upgrade and one or more headends. Rather, Palazzi merely describes a modem that is included in a set top terminal. Palazzi fails to even mention a hardware upgrade for a set top terminal that includes a hardware upgrade modem.

Palazzi also fails to disclose, teach or suggest processing circuitry, coupled to the hardware upgrade processor, for receiving interactive input from the subscriber, for interpreting the received interactive input, for generating responses based on the received interactive input and for providing the generated responses to the microprocessor of the set top terminal. Palazzi only discloses a set top terminal. Palazzi does not mention the expansion card includes processing circuitry that is coupled to the hardware upgrade processor.

Palazzi also fails to disclose, teach or suggest that the data received by the modem of the hardware upgrade comprises information from an interactive service for accessing an on-line database thereby allowing a user to use the set top terminal to engage in actual transactions using two-way communications over the modem of the hardware upgrade with the interactive service via submenus provided by the hardware upgrade microprocessor as an overlay to a program displayed by the microprocessor of the set top terminal. Instead, Palazzi discloses that the set top terminal communicates with a remote database. Palazzi does not disclose an hardware upgrade card or other type of expansion card that communicates with anything but the set top terminal.

Thus, Banker, Hoarty and Palazzi, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claims 1, 14, 24 and 42.

Dependent claims 4-9, 18-19, 23, 28-29, 43, 45-50, 56 and 59 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claims 1, 14, 24 and 42, respectively. Further dependent claims 4-9, 18-19, 23, 28-29, 43, 45-50, 56 and 59 recite additional novel elements and limitations. Applicant reserves the right to argue independently the patentability of these additional novel aspects. Therefore, Applicant respectfully submits that dependent claims 4-9, 18-19, 23, 28-29, 43, 45-50, 56 and 59 are patentable over the cited references.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 865-380-5976. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 13-2725 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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